

AMENDMENTS TO THE DRAWINGS:

The replacement sheets in the Appendix include changes to Figure 9 and a new Figure 10. In Figure 9, the previously omitted element number 80 has been added for the repeater. Figure 10 includes the features in claim 5 and does not include any new matter. The description of the drawings in the specification has been amended into conformance and a paragraph describing Figure 10 has been added to page 23.

REMARKS

The title, specification, drawings, and abstract have been amended to make editorial changes therein, bearing in mind the criticisms in the Official Action, to place the application in condition for allowance at the time of the next Official Action.

The Official Action objects to the form of claims 1-2 and 5-10. Claims 1 and 5-10 have been amended and claim 2 has been canceled. Withdrawal of the objection is respectfully requested.

New claims 11-14 have been added.

Claims 9-10 were rejected under 35 U.S.C. 101, and have been amended as suggested in the Official Action. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-4 were rejected as anticipated by Japanese Publication Number 2000022081. Claim 1 has been amended and claim 2 has been canceled. Reconsideration and withdrawal of the rejection are respectfully requested.

Among other features, claim 1 provides that the repeater circuits are optimized in electrical characteristics for a delay condition for a location thereof. This reference does not disclose that the repeater circuits are optimized for a delay condition for a location thereof and thus the amended claims avoid this rejection under §102.

Claims 1-4 were rejected as anticipated by JONES "JTAG Clock & Control Signal Distribution Scheme," Motorola Technical Developments, Vol. 18, March 1993.

Reconsideration and withdrawal of the rejection are respectfully requested because this reference does not disclose that the repeater circuits are optimized for a delay condition for a location thereof. JONES discloses that the buffer circuits are equidistant (first page, second paragraph from bottom of right-hand column) and does not indicate that they are to be optimized for a delay condition at the location thereof. Thus the amended claims also avoid this rejection under §102.

The indication that claims 5-10 include patentable subject matter is acknowledged with thanks. In reliance thereon, these claims have been amended solely as to form in response to the criticisms in the Official Action.

New claims 11-14 correspond to claims that were allowed in a corresponding European application. Consideration and allowance of the new claims are respectfully requested.

New claim 11 generally corresponds to original claim 1 to which has been added the feature that the empty cell is not connected to the external pin (e.g., Figure 4).

The applied references do not disclose or suggest a structure in which the empty cell which is not connected to the external pin has a repeater circuit that receives the test signal. JONES relates to a clock supply method for reducing the

skew of the clock supplied to the boundary scanning cell, and does not disclose the repeater circuit provided in the peripheral test signal path. JP '081 is directed to reducing the wiring length from the I/O cell to the internal circuit by assembling the function cell and the peripheral components into a new block, and is different from claim 11 having the empty cell for the test wiring. Therefore, the semiconductor integrated circuit of claim 11 can suppress a delay of a test signal and waveform depressions caused by an empty cell and can ensure delay adjustment. As a result, the reliability and the precision of the test are improved. Furthermore, claim 11 allows connection of test nets and insertion of repeaters by merely laying out I/O cells based on the device specification. This reduces the design and development cost for test facilitating design and makes it easier to cope with small production of multiple types of devices.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

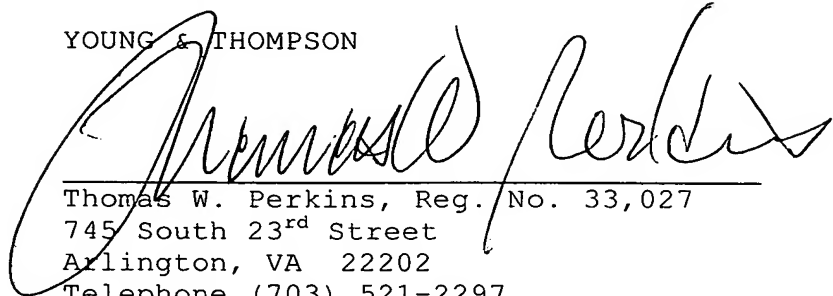
Please charge the fee of \$200 for the extra independent claim added herewith, to Deposit Account No. 25-0120.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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TWP/lk

APPENDIX:

The Appendix includes the following items:

- an amended Abstract of the Disclosure
- two replacement drawing sheets